

# Sequence Listing

<110> Universitaet Leipzig

<120> Method and Means for the Determination of Defined States or Modifications in the Mucus of the Uterus or in the Epithelium of Other Organs

<130> 401P07PCT-US

<140> 10/559,406

<141> 2006-05-30

<150> PCT/DE04/01210

<151> 2004-06-04

<150> DE10325639.3

<151> 2003-06-06

<150> DE10325638.5

<151> 2003-06-06

<160> 15

<210> 1

<211> 15

<212> PRT

<213> artificial sequence

<220>

<223> Epitope e-beta-9 (e-beta-hCG)

<400> 1

Thr Cys Asp Asp Pro Arg Phe Gln Ala Ser Ser Ser Ser Lys Ala  
1 5 10 15

<210> 2

<211> 15

<212> PRT

<213> artificial sequence

<220>

<223> Epitope beta-9 (t?hCG)

<400> 2

Thr Cys Asp Asp Pro Arg Phe Gln Asp Ser Ser Ser Ser Lys Ala  
1 5 10 15

<210> 3

<211> 15

<212> PRT

<213> artificial sequence

<220>

<223> Epitope e-beta-1 (e-beta-hCG)

<400> 3

Ser Arg Glu Met Leu Arg Pro Arg Cys Arg Pro Ile Asn Ala Thr  
1 5 10 15

<210> 4  
 <211> 15  
 <212> PRT  
 <213> artificial sequence  
 <220>  
 <223> Epitope beta-1 (t-beta-hCG)  
 <400> 4

Ser Lys Glu Pro Leu Arg Pro Arg Cys Arg Pro Ile Asn Ala Thr  
 1 5 10 15

<210> 5  
 <211> 861  
 <212> DNA  
 <213> homo sapiens  
 <220>  
 <223> beta-hCG beta-7 cDNA-Sequenz  
 <400> 5

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actgagtctc	agaggtcact	tcaccgtggt	ctccgcctca	tccttggcgc	tagaccactg	180
aggggagagg	actgggggtgc	tccgctgagc	cactcctgtg	cctccctggc	cttgtctact	240
tctcgcccc	cgaagggtta	gtgtccagct	cactccagca	tcctacaacc	tcctggtggc	300
cttgacgccc	ccacaaaccc	gaggtataaa	gccaggtaca	ccaggcaggg	gacgcaccaa	360
ggatggagat	gttccagggg	ctgctgctgt	tgctgctgct	gagcatgggc	gggacatggg	420
catccaagga	gatgcttcgg	ccacggtgcc	gccccatcaa	tgccaccctg	gctgtggaga	480
aggagggctg	ccccgtgtgc	atcacctgca	acaccacccat	ctgtgccggc	tactgcccc	540
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gcgatgtgcg	cttcgagtec	atccggctcc	ctggctgccc	gcgcggcgctg	aaccccgctgg	660
tctcctacgc	cgtggctctc	agctgtcaat	gtgcactctg	ccgccgcagc	accactgact	720
gcgggggtcc	caaggaccac	cccttgacct	gtgatgaccc	ccgcttccag	gcctcctctt	780
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ccccgatcct	cccacaataa	a				861

<210> 6  
 <211> 861  
 <212> DNA  
 <213> homo sapiens  
 <220>  
 <223> beta-hCG beta-6 cDNA-Sequenz  
 <400> 6

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cttgccgccc	ccacaaaccc	gaggtatgaa	gccaggtaca	ccaggcaggg	gacgcaccaa	360
ggatggagat	gttccagggg	ctgctgctgt	tgctgctgct	gagcatgggc	gggacatggg	420
catccaagga	gccacttcgg	ccacggtgcc	gccccatcaa	tgccaccctg	gctgtggaga	480
aggagggctg	ccccgtgtgc	atcacctgca	acaccacccat	ctgtgccggc	tactgcccc	540
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tctcctacgc	cgtggctctc	agctgtcaat	gtgcactctg	ccgccgcagc	accactgact	720
gcgggggtcc	caaggaccac	cccttgacct	gtgatgaccc	ccgcttccag	gcctcctctt	780
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ccccgatcct	cccacaataa	a				861

<210> 7  
 <211> 861  
 <212> DNA  
 <213> homo sapiens  
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 <223> e-beta-hCG ("endo" beta-6e) cDNA-Sequenz  
 <400> 7

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actgagtctc agaggtcact tcaccgtggt ctccgcctca tccttggygc tagaccactg 180
aggggagagg actgggggtgc tccgctgagc cactcctgtg cctccctggc cttgtctact 240
tctcgcccc cgaagggtta gtgtcsagct cactccagca tcctacaacc tcctgggtggc 300
cttgmccccc ccacaamccc gaggtatraa gccagggtaca ccaggcaggg gacgcaccaa 360
ggatggagat gttccagggg ctgctgctgt tgctgctgct gagcatgggc gggacatggg 420
catccargga gmyrcttcgg ccacggtgcc gcccaccaa tgccaccctg gctgtggaga 480
aggagggctg ccccgctgtgc atcacctca acaccacccat ctgtgccggc tactgcccc 540
ccatgacccg cgtgtgcag ggggtcctgc cggccctgcc tcagggtgtg tgcaactacc 600

gcatgtgctg cttcgagtc atccggctcc ctggctgccc gcgcggcgtg aaccccggtg 660
tctcctacgc cgtggctctc agctgtcaat gtgcactctg ccgcgcgagc accactgact 720
gcgggggtcc caaggaccac cccttgacct gtgatgacct ccgcttcag gcctcctctt 780
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<210> 8  
 <211> 165  
 <212> PRT  
 <213> homo sapiens  
 <220>  
 <223> t-beta-hCG beta-5,beta-8,beta-3(prehormone)  
 <400> 8

```

Met Glu Met Phe Gln Gly Leu Leu Leu Leu Leu Leu Ser Met Gly
-20                -15                -10                -5

Gly Thr Trp Ala Ser Lys Glu Pro Leu Arg Pro Arg Cys Arg Pro Ile
      -1  1                5                10

Asn Ala Thr Leu Ala Val Glu Lys Glu Gly Cys Pro Val Cys Ile Thr
      15                20                25

Val Asn Thr Thr Ile Cys Ala Gly Tyr Cys Pro Thr Met Met Arg Val
      30                35                40

Gly Val Leu Gln Leu Pro Ala Leu Pro Gln Val Val Cys Asn Tyr Arg
      45                50                55                60

Asp Val Arg Phe Glu Ser Ile Arg Leu Pro Gly Cys Pro Arg Gly Val
      65                70                75

Asn Pro Val Val Ser Tyr Ala Val Ala Leu Ser Cys Gln Cys Ala Leu
      80                85                90

Cys Arg Arg Ser Thr Thr Asp Cys Gly Gly Pro Lys Asp His Pro Leu
      95                100               105

Thr Cys Asp Asp Pro Arg Phe Gln Asp Ser Ser Ser Ser Lys Ala Pro
  
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110		115		120											
Pro	Pro	Ser	Leu	Pro	Ser	Pro	Ser	Arg	Leu	Pro	Gly	Pro	Ser	Asp	Thr
125				130						135					140

Pro Ile Leu Pro Gln  
145

<210> 9  
 <211> 165  
 <212> PRT  
 <213> homo sapiens  
 <220>  
 <223> beta-hCG beta-7 (prehormone)  
 <400> 9

Met	Glu	Met	Phe	Gln	Gly	Leu	Leu	Leu	Leu	Leu	Leu	Ser	Met	Gly
-20				-15					-10					-5

Gly	Thr	Trp	Ala	Ser	Arg	Glu	Met	Leu	Arg	Pro	Arg	Cys	Arg	Pro	Ile
			-1	1				5					10		

Asn	Ala	Thr	Leu	Ala	Val	Glu	Lys	Glu	Gly	Cys	Pro	Val	Cys	Ile	Thr
	15					20						25			

Val	Asn	Thr	Thr	Ile	Cys	Ala	Gly	Tyr	Cys	Pro	Thr	Met	Met	Arg	Val
30					35						40				

Gly	Val	Leu	Gln	Leu	Pro	Ala	Leu	Pro	Gln	Val	Val	Cys	Asn	Tyr	Arg
45				50					55					60	

Asp	Val	Arg	Phe	Glu	Ser	Ile	Arg	Leu	Pro	Gly	Cys	Pro	Arg	Gly	Val
			65					70						75	

Asn	Pro	Val	Val	Ser	Tyr	Ala	Val	Ala	Leu	Ser	Cys	Gln	Cys	Ala	Leu
		80					85						90		

Cys	Arg	Arg	Ser	Thr	Thr	Asp	Cys	Gly	Gly	Pro	Lys	Asp	His	Pro	Leu
	95					100						105			

Thr	Cys	Asp	Asp	Pro	Arg	Phe	Gln	Ala	Ser	Ser	Ser	Ser	Lys	Ala	Pro
110						115					120				

Pro	Pro	Ser	Leu	Pro	Ser	Pro	Ser	Arg	Leu	Pro	Gly	Pro	Ser	Asp	Thr
125				130						135					140

Pro Ile Leu Pro Gln  
145

<210> 10  
 <211> 165  
 <212> PRT  
 <213> homo sapiens  
 <220>  
 <223> e-beta-hCG beta-6e (with Arg in Pos 2) (prehormone)  
 <400> 10

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 Gly Thr Trp Ala Ser Arg Glu Met Leu Arg Pro Arg Cys Arg Pro Ile  
 -1 1 5 10  
  
 Asn Ala Thr Leu Ala Val Glu Lys Glu Gly Cys Pro Val Cys Ile Thr  
 15 20 25  
  
 Val Asn Thr Thr Ile Cys Ala Gly Tyr Cys Pro Thr Met Met Arg Val  
 30 35 40  
  
 Gly Val Leu Gln Leu Pro Ala Leu Pro Gln Val Val Cys Asn Tyr Arg  
 45 50 55 60  
  
 Asp Val Arg Phe Glu Ser Ile Arg Leu Pro Gly Cys Pro Arg Gly Val  
 65 70 75  
  
 Asn Pro Val Val Ser Tyr Ala Val Ala Leu Ser Cys Gln Cys Ala Leu  
 80 85 90  
  
 Cys Arg Arg Ser Thr Thr Asp Cys Gly Gly Pro Lys Asp His Pro Leu  
 95 100 105  
  
 Thr Cys Asp Asp Pro Arg Phe Gln Ala Ser Ser Ser Ser Lys Ala Pro  
 110 115 120  
  
 Pro Pro Ser Leu Pro Ser Pro Ser Arg Leu Pro Gly Pro Ser Asp Thr  
 125 130 135 140  
  
 Pro Ile Leu Pro Gln  
 145

<210> 11  
 <211> 141  
 <212> PRT  
 <213> homo sapiens  
 >220>  
 <223> beta-LH beta-4 (prehormone)  
 <400> 11

Met Glu Met Leu Gln Gly Leu Leu Leu Leu Leu Leu Ser Met Gly  
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 Gly Ala Trp Ala Ser Arg Glu Pro Leu Arg Pro Trp Cys His Pro Ile  
 -1 +1 5 10  
  
 Asn Ala Ile Leu Ala Val Glu Lys Glu Gly Cys Pro Val Cys Ile Thr  
 15 20 25  
  
 Val Asn Thr Thr Ile Cys Ala Gly Tyr Cys Pro Thr Met Met Arg Val  
 30 35 40

Leu Gln Ala Val Leu Pro Pro Leu Pro Gln Val Val Cys Thr Tyr Arg  
 45 50 55 60  
 Asp Val Arg Phe Glu Ser Ile Arg Leu Pro Gly Cys Pro Arg Gly Val  
 65 70 75  
 Asp Pro Val Val Ser Phe Pro Val Ala Leu Ser Cys Arg Cys Ala Pro  
 80 85 90  
 Cys Arg Arg Ser Thr Ser Asp Cys Gly Gly Pro Lys Asp His Pro Leu  
 95 100 105  
 Thr Cys Asp His Pro Glu Leu Ser Gly Leu Leu Phe Leu  
 110 115 120

<210> 12  
 <211> 10  
 <212> PRT  
 <213> artificial sequence  
 <220>  
 <223> Peptide P1 (e-beta-hCG)  
 <400> 12

Cys Asp Asp Pro Arg Phe Gln Ala Ser Ser  
 1 5 10

<210> 13  
 <211> 10  
 <212> PRT  
 <213> artificial sequence  
 <220>  
 <223> Peptide K1 (t-beta-hCG)  
 <400> 13

Cys Asp Asp Pro Arg Phe Gln Asp Ser Ser  
 1 5 10

<210> 14  
 <211> 11  
 <212> PRT  
 <213> artificial sequence  
 <220>  
 <223> Peptide P2 (e-beta-hCG)  
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Ser Arg Glu Met Leu Arg Pro Arg Cys Arg Pro  
 1 5 10

<210> 15  
 <211> 11  
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 <220>  
 <223> Peptide K2 (t-beta-hCG)  
 <400> 15

Ser Lys Glu Pro Leu Arg Pro Arg Cys Arg Pro  
 1 5 10